

LIBRARY OF CONGRESS.

Chap. RC126 No. R52

UNITED STATES OF AMERICA.

Ç. .







THE CHOLERA:

ITS

CAUSE, PREVENTION, AND CURE.

BY

CHARLES RICHARDSON, M. D.

NEW-YORK:

D. APPLETON & COMPANY, 200 BROADWAY.

PHILADELPHIA:

G. S. APPLETON, 164 CHESNUT-STREET.

1849.



Entered according to Act of Congress, in the year 1849, By D. APPLETON & COMPANY,

In the Clerk's Office of the District Court of the United States for the Southern District of New-York.

INTRODUCTION.

TO THE PUBLIC.

Having from circumstances seen considerable of Asiatic cholera in 1832, some time since I wrote out hastily the following, with a view to its publication in the papers. Want of room prevented its insertion in the daily papers to which it was offered. I hoped that my rough notes might lead to some useful hints which, in more able hands, might supply my mite to arrest the approach and mitigate the malignity of this horrible disease. I do not pretend that this work is a scientific treatise upon the cholera, it never was by me intended to be such; but only a plain blunt statement of the (in my opinion) cause, preventive, and curative means fit to be placed in the hands of all. The frequent repetitions are purposely made, so as to impress my meaning distinctly on the weakest minds, and make my advice useful in cases of emergency, where, as is often the case, medical advice cannot be immediately obtained. I ask nothing but a fair trial of my mode of treatment; if the portending disease be similar to the last, I feel confident

that it will be successful; if different, the treatment may require some modification. Not being in the habit of writing for the press, I trust any ambiguity in explaining my meaning, will be viewed with indulgence, overlooking the incapacity of the writer in the importance of the subject on which he has endeavored to throw some light, however feeble, to avert and remedy so deplorable a calamity.

I shall feel fully rewarded if, from the following crude remarks, any one suggestion shall be made available in arresting or mitigating so dire a scourge, and if only one human being should be snatched from an untimely grave through their agency.

To the notes on Cholera Infantum and the cure of Shipley's servant, I particularly solicit the attention of the public,—hoping in the first, if followed, it may diminish the dreadful mortality among children, and the second, (death from drinking cold water when overheated) if on repetition, the remedy is successful, that at last an antidote has been found for what has heretofore been a desideratum in medicine.

I have written the following in the first person, not from any assumption of egotism, but simply because it was more easy and natural so to do; the dogmatic and positive tone assumed, was for the purpose of more deeply impressing on the minds of all what I consider momentous truths.

Respectfully,

CHARLES RICHARDSON.

Baltimore, June 1st, 1849.

CHOLERA.

THE threatened approach of the cholera makes it a point of wisdom that every means should be employed to avert its attack, or if that be impossible, to mitigate its violence, and thereby render it more easily relieved, by a judicious course of medical treatment.

Having been employed by the city of Baltimore during the prevalence of the cholera in 1832, to take charge of one of the medical districts, a large number of cases fell under my care; and thinking that the facts observed, and the experiments instituted by me, conclusively prove the origin or cause of cholera, and by consequence, the proper preventive and curative means, I shall forthwith proceed to state them.

The origin of cholera I believe to depend upon a minute diminution of the vitality (oxygen) of the atmosphere. This may arise either from a less portion of oxygen or the admixture of some other ethereal substance with the air; and I maintain that this hypothesis will account for every incident in cholera. Nine out of ten cases I saw, were in a state of collapse when I was

called to them, and in what follows I shall invariably refer to that stage of the disease, unless otherwise stated.

The prominent symptoms were, a cold, clammy, doughy state of the skin-no pulse-very slight or no perceptible action of the heart—hippocratic appearance of the countenance—no secretion from the kidneys or any other organ-very seldom, although occasionally, ricewater dejections from the bowels-often cramps-slowness of speech-faculties of the mind perfect-great torpor and want of excitability. Searching for the cause of this disease, I was first led to examine the electrical state of the atmosphere. From many experiments I found that the fluid could by friction be accumulated in the ordinary time, as previous to the prevalence of the disease, verified by many experiments since. In six cases I isolated the subject of disease, charged the system with the fluid, keeping one case in this state for five hours. As a remedial agent I found it in no instance of advantage. Independent of this, there was the usual quantity of thunder storms during the prevalence of cholera. galvanic battery, on examination, exhibited nothing uncommon in its accumulation or action. I then turned my attention to the atmosphere. I thought I discovered in myself and others a degree of languor, and some slight increase of respiration, or more hurried breathing. On subjecting this to experiment, I found in many in health, from one to five inspirations more than ordinary in the minute; in fact, in most persons, by a little exertion, the respiration was more easily hurried than common. The blood in man is of two kinds, venous and arterial—all the secretions, with one exception, are performed by the extreme capillaries of the arteries. venous blood is changed into arterial or secretory, by

being subjected to the action of the air inhaled by the lungs. The common doctrine has been, that there was an absorption of oxygen, which, combined with the venous, converted it into arterial blood. A more modern theory is, that decarbonization of the venous, converts it into arterial, blood. I believe there is an actual absorption of oxygen, yet think the oxygen may perform a double purpose, by removing the excess of carbon in the form of carbonic acid. Without an absorption of oxygen, the bright vermilion color of the blood could never be maintained. But to let all theory pass-I am writing so that every one may understand. Avoiding all technicals as far as possible, I come to the simple fact, which all know, that no animal, for any length of time, can exist without a supply of air, and that through the air, imbibed by the lungs, there is some change effected in the blood which is necessary to the life of the animal. Now this change I believe to be the absorption of oxygen and its combination with the blood; and I further believe this oxygen in the blood to be the stimulus to all secretory action. I also maintain, that the diminution in the vitality of the atmosphere may be in such a slight proportion as to produce dire consequences, and yet be imperceptible to any chemical agents yet known; and although, by analysis of the air, no perceptible change can be perceived in its component parts, yet in its effects as a chemical agent, in processes dependent on atmospheric action, the fact of a diminution of the vitality of the atmosphere can be as demonstratively proved, as if upon analysis there was found a less proportion of oxygen, one of its constituents.

Believing as above, I obtained, through the politeness of Doctor Ducatel, Professor of Chemistry in the

University of Maryland, a large portion of pure oxygen, prepared by him, as also nitrous oxide. The first case in which I used these agents was John Bates of Unionstreet; he was in an advanced stage of collapse when I saw him; I gave to him the bladder containing nitrous oxide. He imbibed 150 cubic inches with no perceptible effect. I then combined 120 cubic inches of atmospheric air with the same quantity of oxygen, but yet with no effect. I exhausted of this mixture 500 cubic inches. I then proceeded to give him the pure oxygen. On the second or third inspiration (although in his case there was no perceptible action of the heart or arteries) there was a large full pulse, and after inhaling about 150 cubic inches, a brightened appearance of the countenance, and an excessive eagerness to grasp and retain the bladder, although exhausted of the gas. This man imbibed about 450 cubic inches of oxygen; during the whole of which time the pulse was large, regular, and soft, but in less than two minutes after he ceased to breathe the oxygen, the heart ceased perceptibly to act, and there was no pulse at the wrist. was the invariable action of the inhalation of oxygen in some twenty other cases, which fully led me to believe, that if a person could, in a state of collapse, have been supplied with pure oxygen for a sufficient length of time, it might have removed the disease.

Now, the cholera is a disease of great torpidity, and want of excitability, and in the successful mode of treatment I adopted, I found that a dose of medicine, to act beneficially, must be increased about five times in strength; the vitality of the system (living, not dead matter,) is what medicine acts upon, therefore it must be evident to all, however unlearned, that if the torpid-

ity of the system is five times increased, or its excitability five times diminished, the dose of medicine should be proportionally increased, and the interval between each dose diminished, to have the same effect as on a person in ordinary health. This view of the case was most lamentably neglected by many physicians, and very many persons lost their lives by want of energy and prompt efficient action, in the adapting the dose of medicine, and its repetition to the susceptibility of the system. After these experiments with the oxygen, I proceeded to examine the lead factories, some of the products of which are partly dependent on atmospherical oxydation, and was informed by Mr. Gist that the production of some of his chemicals, which in ordinary times took from three to five days to perfect them, during the prevalence of cholera took from thirteen to fifteen days. On examination I found this to be the fact. now considered that further experiments were superfluous, as this fact conclusively demonstrated the want of the usual vitality of the atmosphere. In further proof of my hypothesis, the disease did not occur in small villages, or in the country, where the air had a freer circulation, and was of course purer than in crowded cities. Having by all the above, I think, fully proved the deficiency of the vitality of the air, I shall proceed to notice what would be the effect of the deprivation of the due proportion of oxygen in the blood, and the first parts which would become disordered by this deficiency. I believe it is self-evident, that the extreme arterial capillary, or secretory extremities, would be the first affected. This is the fact in cholera—no secretion from the kidneys—I have seen many cases in which not one drop was secreted by them for five or six days; all other

secretions were in the same state. The matter thrown up by vomiting, and from the bowels, is no secretion a mere exhalation, proved, in my opinion, by the dissection and examination of several cases by myself, as also some in conjunction with the late Dr. Warner. In these cases, by the application of a microscope of large magnifying power, the mouths of the exhalent or secretory vessels of the internal coat of the bowels were perceptible to the eye—apparently the walls very much relaxed, and calibre increased in volume; in fact, they had lost their accustomed stimulus necessary to their legitimate action of secretion, became relaxed, and poured out this rice-water exhalation. I do not believe the disease of cholera is perfectly formed until collapse occurs, after which there is very little of this exhalation. Now what would be the effect, in a person in health, of a sudden stoppage of secretion?—certainly a collapse of the vital power. This is cholera. There is said to be little or no secretion and absorption in the brain-how is the mind in all cases of cholera? why, clear and undisturbed in all its faculties, as in health. In many parts of Germany, and some of Russia, as well as in Persia, and indeed in some parts of the United States, large bonfires were resorted to as a preventive to the spread of cholera. Invariably, wherever this means was used to any extent, it was found to increase the number of cases, and the malignity of the disease. The cause is obvious to all. Combustion is fed by the oxygen of the atmosphere. The great source of the supply of oxygen to the atmosphere, is that of the absorption of carbon, and the disengagement of the oxygen by vegetable matter. would be a subject of peculiar interest—a scientific examination to ascertain if the great destruction of the

forests and other vegetable matter, and the immense increase of combustion all over the world, might not lead to a disturbance of the just equilibrium of the production and consumption of oxygen, so as to leave the world (saying that my hypothesis is correct) subject to periodical invasions of the cholera.

If I find that the public think that these notes, loosely and hurriedly thrown together, may be useful, I shall be tempted in my next to proceed to show the true preventive means, as also to take into consideration the various remedies most popular with physicians for the cure of this disease—the fallacy of the autopsic state, on which most of these remedies were predicated, and many curious examples of the inertness of the means used.

I believe, if the approaching epidemic assumes a character similar to the last, that with proper treatment, four per cent. should be the greatest loss in collapsed cases, and in its primary stages, without the constitution is worn out by previous disease, or destroyed by excess in drinking, or other injurious habits, every case should be cured by prompt and active treatment.

PREVENTION-GENERAL AND PERSONAL.

The foregoing statements being admitted, the real preventives are obvious to all, viz., to remove every species of fermenting matter, either vinous, acetous, or putrefactive, and to reduce the consumption of oxygen by combustion, to the very lowest degree possible. In all recommendations of preventives this last, combustion, has been altogether overlooked, and it would appear strange that among so many men of the most acute genius, and learned in all sciences, that this, the great destroyer of the vitality of the air, should never have been once mentioned, but that all have joined in the echo for the removal only of putrefactive matter, merely one of the agents of the deterioration of the atmosphere; to be effective as general preventives, all agents that absorb the oxygen of the atmosphere must be as far as possible dispensed with. In one word, I recommend the removal of all matter subject to fermentation, as well vinous and acetous as putrefactive; and above all, to reduce combustion as above, to the very lowest degree possible; and in fact there might be circumstances in which the public safety might call for the stoppage of all manufactories which consume oxygen either by combustion or otherwise, even if the public purse should have to pay damages to the owners thereof.

The best personal preventives are cleanliness and great attention to diet, regularity in every thing, a fixed hour to sleep, the same to eat, excess in nothing, temperance in all things, vegetables and fruits of all kinds should be avoided as dangerous—beefsteaks with rich gravies I found best, occasionally ham; a few ate potatoes, which had fully come to maturity; salt fish was also much eaten, fresh fish very seldom; bread I never ate; soda and water crackers, and ship-biscuit are best; coffee and tea were generally used. There was, during the prevalence of the disease, a tendency in all to looseness of the bowels; many resorted to tonics and astringents, some to burned brandy; this was very injurious; on the contrary, provided it was done with proper medicines, an occasional purgative was of the greatest use as a preventive, and many who had the premonitory symptoms strongly marked, were entirely relieved by taking two or three pills, prepared from a recipe made by me, every two or three days. These pills were alterative and gently laxative, and created no disturbance in the system. To their occasional use by myself, as well as many hundred others, I attribute their and my escape from the cholera. I regret that before my determination to publish these loose and undigested notes and recollections of the cholera, I had sold this recipe to Mr. Charles P. Rogers, Druggist, of Baltimore, so that I am in honor bound to do contrary to my wish, which was to make it public. These pills, however, can be obtain ed in any quantity from him, pure and genuine.

POPULAR REMEDIES.

The Cholera being a new [Note I.] disease of which very little was known, coming upon us suddenly for the first time in 1832, the Medical Profession were at a loss what mode of treatment was most proper. Every thing was recommended, and strange to say, continues to this day to be recommended. Many things were used, some the most preposterous and unreasonable; no matter how absurd or inert the nostrum, still to many it was a certain specific. Among them were direct contraries, to wit: hot bath-cold bath; rubbing and roasting before the fire-freezing with ice; bleeding, hot stimulating drinks-ice-water, &c., &c., all cured their myriads, yet still the cholera progressed. In fact, it appeared as if the Faculty were startled and thrown off their balance, and all was chaos. But as light is often said to come out of darkness, I trust that if the cholera invades us, it will be met by all with calmness,—the Faculty especially; (who are not exceeded in learning, deep research, and acuteness in adapting the means to the end, by that of any other nation,) who, by applying the ordinary rules of the profession, to an extraordinary disease, will readily fall upon the best curative means. Indeed, I am fully convinced, that 90 out of 100 cases

would have been cured if they had occurred in ordinary times, when there was no excitement, by applying the common rules of the profession.

The three most popular remedies were bleeding, camphor, and opium. When the disease first appeared in America, European prescriptions were resorted to; in New-York the recommendation of the Physicians of Canada,—in Philadelphia those of New-York,—and in Baltimore, those of Philadelphia; for this disease travelled from north to south, and within a few weeks' interval from city to city, so that it occurred a few weeks later in Baltimore than in Philadelphia, and the remedies recommended there, were those first resorted to in Philadelphia, the most prominent of which were bleeding, and calomel, and opium.

Bleeding, I never found admissible in any case, but saw many sink under its operation that I thought might have been saved. I was sent for in nine cases, one after the other, where, before I arrived, another physician had been called in; he immediately proceeded on arrival to let blood. In eight out of the nine cases he had either just done bleeding, was in the act of tying up the arm, or the blood was flowing when I arrived. died in the act of blood-letting, and none survived above half an hour. From a pound to a pound and a half was taken from each of these persons. In the ninth case I arrived when the Dr. was tying the ligature about the arm preparatory to bleeding. I looked around and saw five interesting little children, the mother, who was the subject of disease, a respectable German lady, residing in Saratoga, near Cove-street. I craved a conference with the Dr. and objected strenuously to his bleeding her, stating to him that I had seen him bleed profusely

eight other persons within a week, several of whom died under the operation, and none survived half an hour; and that I would not consent that this lady should be bled. His reply was, What could be done then?—that bleeding was the true treatment, for the disease was dependent on mucous congestion in the bowels, according to autopsic examinations made in Philadelphia. (Of this more hereafter.) I recommended the remedies used by me and mentioned in the sequel, which were successful, and this lady recovered.

Respecting congestion in the intestines, I examined several cases after death, and it is true there appeared to be an accumulation of blood in the vessels of the bowels; but on minute examination I discovered that the appearance was fallacious, for to be congestive, it must be in the arteries; whereas it was a mere turgidness of the veins. In fact, the blood had to be in some part of the vascular system after death; where there was the least muscular pressure, there the blood would be, and there in most cases it was found, in the veins of the bowels. Such was the fact, and by adapting the remedies to the living in this disease, (as in many others,) founded on the fallacious deductions drawn from the examination of the bodies of the dead, many thousand persons lost their lives.

This is a disease of partial or entire stoppage of secretion; foster what little life is left; if you apply powerful stimuli, the weak vitality is overwhelmed and smothered, and the person dies. If you abstract blood, the feeble flickering flame of life is at once destroyed, and the person ceases to exist. On the contrary, by every measure try and sustain life, until the proper means hereafter mentioned shall have cleared the ma-

chine of the pressure of the disease. I have often seen much done in half an hour,—generally one hour will suffice to place the person in the lowest state of collapse in comparatively a more safe position, if the efficient mode of treatment to be mentioned is pursued.

Camphor of all other things has been most generally used; it has been lauded as a sovereign preventive and cure, especially camphor-water!!! Why not also brick-dust? for the one is nearly as inert as the other, for all are aware how little camphor water will dissolve. The motive which originally led to the use of camphor, was its supposed quality to relieve the cramps; but to settle the matter with few words, the cramp is not the disease, but the mere effect of the disease. The great mistake in the treatment of this disease, has been, that most of the remedies have been to relieve the effects of the disease, and not the disease itself. It is a known axiom in Philosophy, that remove the cause and the effect will cease. Storm, then, the disease, in its stronghold, relieve it, and then all its mere effects cease; to wit:—the vomiting, the rice-water dejections, cramps, &c.

I saw, and shall narrate from my notes, a melancholy case, of a family treated by camphor. I was called to the family of a Mrs. Baily, living near Hart's Factory, in the suburbs of the town, about 12 o'clock in the night of the 13th of October, 1832. I arrived about 1 o'clock, and was informed that 2 days before, the father had died of cholera, one son was lying dead in the house, from the same disease, and a son and daughter, adults, were lying in a state of collapse, having been sick many hours. I inquired what remedies their family-physician, who was said to be rich, had prescrib-

ed; I was told that the only remedy used in the cases, was a table-spoonful every 2 hours of Camphor water!!

The most powerful of the remedies to be mentioned were employed by me, and I am happy to say, both brother and sister recovered, and the last I heard of them, had large and interesting families around them. While I was attending to these persons, a little girl about 12 years of age, a sister, commenced crying, pressing her hands on her stomach and vomiting, with cramp. I immediately administered the same remedies in a less portion to her, and she never went into collapse, but in a few hours was out of danger.

TREATMENT.

I come now to the treatment, and the means I used.

The first case I saw was a man in Union street, in a state of collapse; I followed the Philadelphia practice, and administered calomel and opium; the man soon died, and I discovered that I had done nothing for him; in fact, the one medicine had counteracted the operation of the other; being a disease of great torpor, and want of excitability, the opium, by increasing the torpor of the system, neutralized the action of the calomel upon the secretions. In this case, blisters, sinapisms, rubefacients with heat were untiringly used, but with no effect.

In the first or forming stage of the disease, known by nausea, laxity of the bowels, evacuations of natural color, occasionally slight cramps in the hands and feet, &c., all cases can be cured; the remedy is mercurial purgation. The calomel should be given in rather larger doses, and less interval between each dose than in ordinary times, until free mercurial purgation is effected, which should be continued until copious bilious discharges are produced, after which there is no danger; for in several hundred cases, no matter how violent, I never saw a free bilious discharge produced but the disease soon yielded, and all danger was over.—[Note 2.]

Now I do not consider that the return of the secretion of the liver is the sole cause of the removal of the disease, but view it as the first visible sign of return of the secretory process, and hail it as the first harbinger of hope; for as the Ptyalism convinces us that the mercury has invaded the whole system, and is only useful as a beacon, so the bilious discharges notify us that the greatest agent for the excitement of capillary action or secretion, with the exception of the stimulūs or oxygen of the blood, is energetically at work, and the disease must soon disappear.

No purgative should be taken after the calomel, but a very light diet. Tonics are inadmissible and unnecessary; aged or weakly persons, in an advanced stage of convalescence, occasionally find benefit from them; however, I think they are of doubtful effect, and to be avoided, if possible; for if the secretory process is not universally re-established, there might be danger of their producing obstruction, and laying the foundation of chronic diseases, which, if not incurable in their nature, might lead to much trouble and suffering in the sequel. In speaking generally of the secretory process, I wish it understood that I refer not only to the glandular discharges, and arterial deposits, but also often include the absorbent and lymphatic vessels.

The next stage of this disease is characterized by violent cramps, severe vomiting, frequent rice-water dejections from the bowels, &c., in fact, the disease is now verging to its complete formation; this state is very dangerous, but yet with energy 99 out of a 100 can be prevented from going into collapse, (or having the disease completely formed,) and can be cured. The remedies are sinapisms of mustard over the whole chest

and abdomen, 15 to 25 grains of calomel every hour or two hours, until free mercurial purgation is produced, continuing the mercury at longer or shorter intervals, as the urgency of the case requires; in some cases I have had to continue the calomel 24, 48, or even 60 hours, gradually diminishing the dose as the most violent symptoms disappeared, until I could safely omit it, and then gave the sweet spirits of nitre, which acted powerfully in restoring the secretion of the kidneys and healthy action of the skin.

I come now to the last stage, that of collapse, wherein the whole vital power is prostrated by the disease now completely formed. The action of the heart nearly ceases, there is no pulse at the wrist, the skin is cold, doughy, and clammy; cramps are occasional; the vomiting and diarrhœa in a measure, cease, and yet the mind is composed, and with the exception of slowness of reply, perfect in its action as in health. This stage requires the greatest activity in treatment—what in ordinary diseases and times is done in hours and days, must now be done in minutes. There is great torpor and want of excitability; blisters will not act, sinapisms produce little or no effect, the skin is apparently dead. Internal stimulants you cannot use, for they will overwhelm the feeble remnant of life: all evacuants are inadmissible, for they produce direct prostration and death. Here, then, is a stage of disease in which nearly all curative means are contra-indicated. What then can be done? Why, the only species of medicine that can be used is such as will stimulate and restore the secretions—that is, calomel. Its action is first alterative, and then purgative; by its alterative and stimulating action it relieves the pressure of the disease, and enables the system to sustain the subsequent purging, for it is well known that of all purgatives the evacuations by calomel are least exhausting. Why, in the very lowest stages of ordinary cholera morbus, is it always given in large doses without fear of prostration, but for its known action as a corrector and restorant of secretion, the disease being dependent on vitiated secretion, or the state of the organ producing vitiated secretion? The remedy that will remove obstruction in an organ and restore the natural secretion, must certainly be alterative, or act as a stimulant to the secretions. This is what we want in cholera. Calomel is well known to possess this power in a greater degree than any other medicine. Calomel is then the medicine for cholera. I have used it in many hundred cases of the disease in the very lowest stages, and the very worst subjects for disease, the paupers of a large and populous city, and have seen them deprived of every thing, having nothing, not even a bed to lay on, (for many refused to be carried to the hospital,) yet under its operation recover within two or three days, from the very lowest stages of collapse: this was not only in one or two cases, but in hundreds.—[Note 3]. But this happy effect has not been produced by giving 5 or 10 grains, and after three or four hours working it off, as is usual, with castor oil or rhubarb, or combining opium with it to neutralize its effect under the mistaken idea of stopping a symptom, or effect of disease. No, the urgency of the case is so great, life is lost if trifled with. In many cases I have given 50 grains every half hour, until evacuations were produced, and have seen it act as a charm in 50 minutes, the cramp, vomiting, and most of the prominent symptoms having measurably ceased. usual practice was to continue the calomel in large do-

ses until the urgency of the case was partially over, but vet the calomel had still to be continued, in most cases for 24 hours, (sometimes far longer,) diminishing the dose, and increasing the interval, as the relief of the disease would allow. Now, to many, this would appear ultra, dangerous, and extravagant, but what I now state was learned at the bed-side of the dying and the dead. An honorable duty was put upon me by my native city, to stand between my fellow-man and the most ghastly disease. Under any circumstances, indecision would have been criminal, and most would have died. I found that calomel, and calomel only, would relieve the disease. I used it, and that fearlessly, and the effect was, with the aid of two other means, hereafter to be mentioned, that out of many hundred cases that fell under my care, excepting the first case, there were only thirteen deaths. The accounts of deaths are on record, and can testify for themselves.

I have heretofore stated, that cholera is a disease of great torpor, and that medicine acts only on vital, not dead matter, and often when giving 50 grains of calomel every half hour, I did not consider that I was giving, under the circumstances, a stronger dose than 10 grains in ordinary times, and under ordinary circumstances; and the physician, who at the bedside of the patient, gives his medicine by rote ("10 grains of calomel, and 20 of jalap, is good for bilious fever, worked off with salts and senna-tea") is no physician; the patient would have a better chance without him, depending only on nature. The dose of medicine must, to be useful, be proportioned to the susceptibility of the system; and if this susceptibility is greatly diminished or almost destroyed, as in cholera, the wise practitioner, who does his duty, never

stops at quantity, but as far as his judgment allows, adapts the means to the end. To show with what impunity violent medicine may at times be used, I will abstract from my notes the case of Major Henry Welling of Elkridge. He was a man of a phlegmatic, torpid temperament, stout and strong, about forty years of age, who had been habitually subject to attacks of bilious fever of a high grade, for the last fourteen years preceding the time I was called to him, which was in the year 1822. I found him laboring under a severe bilious fever. The ordinary remedies were used, but not with much effect, and as the disease progressed, about the tenth day I discovered that there was an obstruction in the gall duct, and that the gall bladder was very much distended, so much so, that fluctuation was perceptible to the fact. His whole system appeared to be torpid, and from the pressure upon it, the vital power seemed to be prostrated and overwhelmed, evidently indirect, for the muscular energy was considerable. The pulse was intermitting, and forty strokes in the minute. There was a pecular idiosyncracy about this man, which was that from a boy, tartar emetic would seldom or never vomit, or even nauseate him. As night approached, the urgency of his case increased; to dislodge the obstruction was absolutely necessary, for I was convinced that before morning the cyst would burst and destroy him, and this could only be done by vomiting. I gave him 24 grain doses of tartar emetic at intervals of twenty minutes with no effect. Other emetics were used in vain. I then took his brother aside, and told him that every thing ordinary had been done, and without effect, and that he could not survive until morning, unless the obstruction was removed. That there was one remedy

yet untried that occurred to me, which was corrosive sublimate—that it had never been used in such a case, but that I had seen my much honored preceptor, the late Doctor George Brown of Baltimore, use it with success on a case of croup, where the membrane was partially formed. That this remedy, if it did not vomit him, would destroy him, and I thought it right to mention it to his friends, for I considered his case desperate, and the proposed remedy more desperate. The brother's reply was, additional professional aid should be called in if I thought proper. I told him it was too late, for the distance was so great that he would be dead or relieved before help could arrive—that I should leave it to the Major, having notified to his friends the desperate nature of the remedy. I then bluntly told the Major that his case was hopeless unless he could be vomited. That there was only one means left, and this was of so violent a nature, that if it did not vomit him it would destroy him; and that I thought it my duty to give him his choice. His reply was, "Give it to me, Doctor." I commenced with 2 grains, then 3, then 5 grains every twenty minutes, until he took fifteen grains of the sublimate. I then gave him 9 grains, and in a few minutes it commenced to act as an emetic and cathartic, violently. The amount of discharge would be incredible if mentioned, but there are many living witnesses to the fact. It was only by the most powerful stimuli that life was sustained. He, however, soon recovered, and never until his death, which took place in 1842, was attacked with bilious, or any other disease. Here is a case, then, that the remedy used with success, under the circumstances, would be certain death in a different case; yet by the use of this apparent violent remedy this man was restored, and gained twenty years of life.

The calomel, then, is my remedy, which seldom failed in doses from 20 to 50 grains, at intervals longer or shorter, as the necessity of the case required, commencing with large and powerful doses, repeated at short intervals, until the pressure is removed from the vital power, then not omitting its use, but diminishing the dose and increasing the interval, until the free action of the system is restored, after which sweet spirits of nitre, largely diluted with water, should be taken as a common drink, for in many cases after the necessity for the continuance of the calomel has ceased, the secretion from the kidneys is not restored.

No nourishment is necessary in the height of the disease, afterwards mild slops made from tapioca, sago, &c., are best.

As calomel brings certain relief, if properly given, now the great difficulty is, in many cases, to prolong life until the calomel can act. Internal stimulants, for reasons before stated, cannot be used; too much heat applied externally, I have seen produce the same effect as stimuli taken internally. We are then reduced to friction and sinapisms. The former I have never noted as being particularly useful, the latter I always used, spread all over the chest and abdomen, generally with good effect. But again, there were many cases in which I was called so late, that the sinapisms had no more effect than if they had been applied to a board. Now it was precisely for this state that I introduced a mode of treatment which, I trust, was the means of saving many lives, for I used it in more than 150 cases, with almost universal success. It was, when I found the person was so low, that mustard, red pepper, &c., lost all stimulating effect, I introduced the practice of taking the whole of the scarf skin off the chest and abdomen, by flannels dipped in boiling water, and applied. I literally scalded the whole Epidermis off, removed it, and applied sinapisms, if I may use the term, of equal quantities of African red pepper and mustard to the naked extremities of the nerves. I generally found, so applied, that it acted as a powerful stimulant, and usually prolonged life until the calomel removed the disease. This will appear a barbarous remedy, but the pain was only momentary, and life was generally saved, and I never saw any subsequent bad effects; for strange to say, in almost all, if not every case, by the time the person was convalescent, the wound was all healed; indeed, I never saw any discharge from such scalds, but this was natural, and was to be expected, from the debility of the secretory power. The abrasion appeared to dry up, as is well known is the case often with vesication produced by epispastics in violent diseases of a typhoid type. When sinapisms acted, I never used the boiling water; when they failed in very bad cases to act in 10 or 15 minutes, I always applied it, if I thought, from the state of the subject, I should not have full 2 hours for the action of the calomel; after the first dose of the mercury, there was often a slight relief of the vomiting, cramps, &c., but generally after the second dose these symptoms vanished in a great degree.

I was called to a German lady living on the place of the late Mr. Robert Walsh, on the Hookstown road, his family physician being out of the way, when sent for. This was about 10 o'clock in the day. I found her in the second stage of the disease, vomiting severe, cramps violent, that peculiar purple hue under the eyes, &c. I gave to her immediately, 30 grains of calomel; the

vomiting was so excessive she partially throwed it up; I repeated the dose, which was not rejected. I remained with her above an hour, at the end of which time, I again repeated the dose; the sinapisms were used as common. When I left her she was comparatively relieved, vomiting had ceased, cramps nearly gone, and the purple hue of countenance very much diminished. I considered her cure certain. I saw her again at one o'clock; I found her, contrary to expectation, sunk into the lowest state of collapse; this was so contrary to what I anticipated, that I immediately inquired what had been done to her, for she was actually in articulo mortis. I was told that she continued to improve after I left her, appeared easy, and had one or two evacuations slightly tinged with bile, but that her family physician had arrived a little before 12 o'clock, countermanded the repetition of the calomel, and bled her profusely; she died fifteen minutes past one o'clock. This was another victim to practice founded on autoptic examinations. It is against the abuse of inferences and practice founded on post-mortem examinations, that I refer to. I do not altogether deny their value; to the surgeon they are of inestimable importance; he has to deal with the mechanism of the machine; they are palpable to the eye, he can lay his hand on the thing, it is a mere mechanical matter; but the Physician has to do with a far higher concern; the motatory power of the vis vitæ, the action of life with and on matter. The sequelæ can only be seen in the dead body, the modus operandi must be learned by examination of the results of power and matter acting conjointly.

In conclusion, to sum up the whole of my experience; for prevention, not only to remove all sources of

the production of impure gases, which by admixture and solution diminish the purity of the air, but also all agents which exhaust directly, by decomposition and absorption the vitality of the atmosphere.

Personal preventives.—Cleanliness, moderation in every thing, a flesh and cracker diet, the occasional use of an alterant laxative, and cheerfulness of mind.

The best treatment.—Avoiding all powerful evacuants or internal stimulants, narcotics, tonics, antispasmodics, &c., but relying on the simple calomel for the cure, and sustaining the feeble life if possible by the application of mustard and red pepper over the whole chest and abdomen, and if the disease is far advanced, rather than lose life, boldly apply it to the raw surface through the agency of boiling water. From the foregoing, it would be supposed that I am a great advocate for the excessive use of mercury; on the contrary, I am opposed generally to its employment, and think that its inordinate and indiscriminate use is injurious. But in a disease like the cholera, which has thrown so much of worth and beauty into the tomb, it is my duty fearlessly to recommend a remedy which I have found so generally to succeed.

NOTES.

Note 1.

I am well aware that antiquarians in medicine have pretended to trace this disease from the most remote times to Avicenna, and from Avicenna down.

Note 2.

Towards the close of the cholera there began to prevail a severe bilious fever, and as the one disappeared, the number of the cases of the other increased, until they were nearly as numerous as the cholera in its greatest height. This fever was very severe, long and tedious in its progress, generally running into a typhoid type. Being still in the employ of the city, I was kept as constantly going as when the cholera prevailed, and there never fell under my charge, a case of this fever in a person who had previously had the cholera, and upon particular inquiry, I could never hear of any person who had the cholera being attacked by this disease.

Note 3.

I have been called to many in old ruinous buildings, in the cellars of unfinished houses, and even on cellar-doors; for there are numbers in the larger cities having no homes. This class of people had a dread of the hospitals, and generally refused to be carried there. I was called to many in such miserable confined holes, that it was a wonder to me how they could creep into them, or how any human being could exist when they were in. Many curious circumstances came to my knowledge, which verified the old adage, "That not one-half of the world know how the other half get on." There was a man who realized a handsome income, by providing lodgings for the homeless. He occupied a large frame house in the precincts of

NOTES. 31

the city. His floors were regularly chalked off in portions, six feet in length, and eighteen inches and two feet in breadth. His regular price was for an eighteen inch space, one cent and a half; for two feet space, two cents for a night's lodging. These were occupied by male and female tenants indiscriminately, who appeared to be as jealous of invasion, and as prompt to make battle in defence of their constricted space as any prince or potentate whatever. Strange to say, this house was generally crowded. I have been called to it to see six cases of cholera in one night. A more disgusting mass of mortality no one ever dreamed of.

Note.—CHOLERA INFANTUM.

The practice in Cholera Infantum is another instance where Empiricism has triumphed, and almost all the remedies have been directed to the cure of the effects or symptoms, instead of the disease. By such mal-practice how many thousand parents have been thrown into despair, and lovely children ushered into the tomb. The great anxiety has always been to stop the looseness of the bowels, vomiting, &c., and this has generally been done by anodynes and astringents. Some occasionally give a little rhubarb, magnesia, or chalk; the creta preparata of the shops (a little clay would be equally effective as the latter, notwithstanding its sounding name,) averaging from one to five drops of laudanum to the dose. Of course, under such a treatment, for a time the bowels are restrained; the doctor when he arrives, asks only (of the poor anxious mother, exhausted by days and nights of watchfulness,) how the bowels are; pronounces the child better, and departs, soon to hear that another victim has been added to the many gone before, by the monstrous absurdity of applying the remedy to the symptoms instead of the disease itself. Cholera Infantum is caused by heat acting on the delicate organism of the child, producing a state of vitiated secretion—this is the disease; the true remedy is to restore the secretion, and the child will be well-vomiting, diarrhea, fever, and all will be gone. I have attended many, and never lost one with this disease. Instead of anodynes, absorbents, astringents, &c., the true remedy is powerful purgation-mercurial purgation-until the fever ceases, after which, if the disease be not relieved, small alternate doses of calomel given every twenty-four or forty-eight hours, until the purity of the secretions are restored; after which country air and mild tonics, such

32 NOTES.

as an infusion of dog-wood bark or very weak chamomile tea, completely restores the infant to its pristine health in a few days; whereas under the usual practice if they survive, it is only by the power of constitution, and the disease wearing itself out, (after undergoing weeks or months of suffering,) weak and delicate, often leaving tendencies to diseases which in many instances lead to death. I remember one among many cases, that of the present Mrs. Brown, the mother of an interesting family of children, who, when an infant, from improper treatment in the commencement of this disease, was so reduced, that she had to take one grain of calomel every night or every other night for two months before she was relieved; yet she gradually improved in appetite and flesh (although she was a mere skeleton when she commenced it,) under this treatment, and eventually became very stout and hearty.

Note.—Shipley's SERVANT.

In the year 1835, I was called to a servant man of Mr. James Shipley, of Howard District, aged about twenty years, stout and muscular. This man had been actively laboring in the harvest-field: the day was extremely hot; he drank largely of very cold water in his heated state, and immediately fell as if shot. I was sent for; living some distance off, it was an hour after the accident before I arrived. I found a large number of people present; the man was straightened and laid out on the ground, and considered to be dead. On. examination I could perceive no symptom of life. The occurrence took place about half a mile from the house. Mr. Shipley had the ox-cart to carry the body home; he was put in, and I accompanied them to the house. On the way it occurred to me, as I had seen so much good effect from the application of boiling water in cholera, to try it on the body of this man. There happened on our arrival to be boiling water ready. A section of blanket was saturated with it, and immediately applied over the stomach, and although there was no visible sign of life and all thought him dead, yet in less than one minute after the application, it took Shipley and myself to hold him, his struggles were so great, and he was soon perfectly relieved.

I mention this, that the remedy may be tried. A second case has not since occurred in my practice so that I could ascertain the certainty of the remedy, or if this was only an accidental occurrence.











